

WILD TYPE



RAT  
Outbred

GENETICALLY  
ENGINEERED  
MODELS  
(GEM)

## Wistar Rat

NATURAL  
IMMUNO-  
DEFICIENT

Strain name: RjHan:WI

Type: Outbred rat

Origin: Zentralinstitut für Versuchstierzucht (Hannover) - 1982 (from Allington Farm - UK - 1964)

NATURAL  
MUTANTS

Colour and related genotype: Albino rat, Tyr<sup>c</sup>/Tyr<sup>c</sup>

Breeding: Good breeder



## Presentation of the model

This strain was selected by DONALDSON in 1906 at the Wistar Institute (USA), from a batch belonging to Chicago University (RUSSEL-LINDSAY, 1979).

The WISTAR rat is an outbred stock, used in all fields of medical and biological research. Its longevity and high rate of spontaneous tumours make it an ideal choice for ageing studies.

It is an albino strain, easy-to-handle, it is however slower learner than Long Evans rat.

Hematological parameters* of 6-13-week old WISTAR RjHan:WI rats		
Parameters	Male	Female
Erythrocytes (10 <sup>12</sup> /l)	8.6 ± 0.4	8.5 ± 0.4
Hematocrit (l/l)	0.48 ± 0.02	0.46 ± 0.02
Hemoglobin (g/dl)	15.9 ± 0.7	15.7 ± 0.6
Mean corpuscular volume (fl)	56 ± 2	54 ± 2
Mean corpuscular rate (pg)	18.5 ± 0.7	18.4 ± 0.6
Hemoglobin concentration (g/dl)	33 ± 1	34 ± 1
Blood platelets (10 <sup>9</sup> /l)	1225 ± 181	1306 ± 176
Leukocytes (10 <sup>9</sup> /l)	15.3 ± 3.7	10.7 ± 2.9
Neutrophils (10 <sup>9</sup> /l)	2.60 ± 0.90	1.68 ± 0.75
Lymphocytes (10 <sup>9</sup> /l)	11.97 ± 3.14	8.44 ± 2.37
Eosinophils (10 <sup>9</sup> /l)	0.21 ± 0.10	0.20 ± 0.10
Monocytes (10 <sup>9</sup> /l)	0.36 ± 0.13	0.27 ± 0.14
Basophils (10 <sup>9</sup> /l)	0.08 ± 0.09	0.05 ± 0.07

Reproductive data <sup>†</sup>	
Monogamous mating according Robertson System	
Litter size at birth	12
Weaning %	94
Productivity index	2.48
Sterility %	2
Gestation time	Between 20 and 23 days
	• D20: 1 %
	• D21: 42 %
	• D22: 54 %
	• D23: 3 %

\* JANVIER LABS 2011 Data, for an indicative basis

Biochemical blood parameters* of 6-13-week old WISTAR RjHan:WI rats		
Parameters	Male	Female
Glucose (g/l)	6.0 ± 0.9	5.4 ± 0.8
Urea (g/l)	5.2 ± 0.7	5.5 ± 1.0
AST (ASAT) (U/l)	93 ± 20	89 ± 17
ALT (ALAT) (U/l)	32 ± 5	30 ± 8
Alkaline phosphatase (U/l)	135 ± 32	104 ± 32
Cholesterolaemia (g/l)	1.8 ± 0.3	1.9 ± 0.4
Triglycerides (g/l)	0.9 ± 0.3	0.5 ± 0.1
Creatinine (mg/l)	49.1 ± 3.7	47.6 ± 4.6



## Main application and research fields

INFECTIOUS DISEASE RESEARCH

METABOLISM, NUTRITION

ONCOLOGY

PHARMACOLOGY

PHYSIOLOGY

TERATOLOGY

TOXICOLOGY

AGEING

contact@janvier-labs.com  
Tel +33 (0)2 43 02 11 91  
[www.janvier-labs.com](http://www.janvier-labs.com)

